

## **AMENDMENTS TO THE CLAIMS**

### **In the Claims:**

The following listing of claims replaces all prior versions and listings of claims in the application.

### **Listing of Claims:**

1. (Currently amended) A computer-implemented information ~~retrieval~~ filtering method, comprising the steps of:

accepting a user input ~~that~~ for selecting[[s]] or de-selecting[[s]] at least one of a plurality of data groupings within a filter tree table, said data groupings being associated with a plurality of data items in an unfiltered data table;

generating a filtering query, including at least one query operator, based on ~~the selected~~ said at least one data grouping[[s]] selected from said plurality of data groupings;

running said filtering query against said unfiltered data table;

receiving a plurality of filtered data items from said unfiltered data table in response to said filtering query;

creating ~~populating~~ a filtered data table with said plurality of filtered data items; and

displaying said filtered data table and said filter tree table.

2. (Previously Presented) The method of claim 1, further comprising the steps of:

selecting one or more data sets automatically or in response to a user input;

receiving a plurality of data items from said one or more data sets;

creating said unfiltered data table based on said plurality of data items ;

displaying said unfiltered data table; and

updating said filter tree table with selectable data groupings associated with said plurality of data items .

3. (Original) The method of claim 1, further comprising the steps of:

generating a summary query from selected data groupings of said filter tree table;  
running said summary query against said filtered data table;  
generating a summary result comprising a data item count for each selected data grouping; and  
updating said filter tree table with said summary results.

4. (Previously Presented) The method of claim 3, further comprising the step of generating one or more data item results in response to said summary query.

5. (Original) The method of claim 1, further including a preliminary step of selecting a data set.

6. (Original) The method of claim 1, wherein said data set comprises a database.

7. (Original) The method of claim 1, wherein said data set comprises one or more data tables.

8. (Original) The method of claim 1, wherein a first filter level of said filter tree table corresponds to a column in said data set.

9. (Original) The method of claim 1, further including the step of displaying a data item count for a particular data grouping.

10. (Previously Presented) The method of claim 9, further including the step of updating all data item counts upon a data grouping selection or de-selection by said user.

11. (Original) The method of claim 1, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

12. (Original) The method of claim 1, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

13. (Original) The method of claim 1, wherein said filtering query is a SQL query.

14. (Previously Presented) The method of claim 1, wherein said user input includes clicking on a selection icon corresponding to a predetermined data grouping.

15. (Currently Amended) A computer-implemented information retrieval method, comprising the steps of:

accepting a user input ~~that~~ for selecting[[s]] at least one data source;

receiving a plurality of data items from said data source;

creating an unfiltered data table that includes said plurality of data items;

displaying said unfiltered data table;

generating a filter tree table that includes selectable data groupings associated with said plurality of data items;

accepting a user input ~~that~~ for selecting[[s]] or de-selecting[[s]] at least one data grouping;

generating a filtering query, based on the selected data groupings, that includes at least one query operator;

running said filtering query against said unfiltered data table;

receiving a plurality of filtered data items from said unfiltered data table in response to said filtering query;

creating a filtered data table that includes said plurality of filtered data items;

displaying said filtered data table;

generating a summary query based on the selected data groupings;

running said summary query against said filtered data table;

generating a summary result including a data item count for each selected data grouping;

updating said filter tree table with said summary results;

displaying said filter tree table including said selected data groupings and associated data item counts; and

branching back to said accepting a user input ~~that~~ for selecting[[s]] or de-selecting[[s]] a data grouping.

16. (Previously Presented) The method of claim 15, wherein said data source comprises a database.

17. (Previously Presented) The method of claim 15, wherein said data source comprises one or more data tables.

18. (Previously Presented) The method of claim 15, wherein a first filter level of said filter tree table corresponds to a column in said data source.

19. (Original) The method of claim 15, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

20. (Original) The method of claim 15, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

21. (Original) The method of claim 15, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

22. (Original) The method of claim 15, wherein said filtering query is a SQL query.

23. (Previously Presented) The method of claim 15, wherein said user input includes clicking on a selection icon corresponding to a predetermined data grouping.

24. (Original) The method of claim 15, wherein said summary result further includes a data item result for said each selected data grouping.

25. (Currently Amended) An information retrieval process, comprising the steps of:  
generating a filtering query based upon one or more user-selected data groupings in a filter tree table, said data groupings being associated with a plurality of data items in an unfiltered data table;

running said filtering query against said unfiltered data table;

receiving one or more filtered data items from said unfiltered data table in response to said filtering query;

creating a filtered data table including said one or more filtered data items;

displaying said one or more filtered data items in said filtered data table;

generating a summary query from the user-selected data groupings in said filter tree table;

running said summary query against said filtered data table to produce a summary result including a data item count for each user-selected data grouping;

providing said summary result to said filter tree table;

displaying said filter tree table; and

branching back to said step of generating a filtering query.

26. (Previously Presented) The information retrieval process of claim 25, further comprising the steps of:

selecting one or more data sets automatically or in response to a user input;

receiving said plurality of data items from said one or more data sets;

creating said unfiltered data table based on said plurality of data items from said one or more data sets;

displaying said unfiltered data table; and

updating said filter tree table with selectable data groupings associated with said plurality of data items .

27. (Original) The information retrieval process of claim 25, further including a preliminary step of selecting a data set.

28. (Previously Presented) The information retrieval process of claim 27, wherein said data set comprises a database.

29. (Previously Presented) The information retrieval process of claim 27, wherein said data set comprises one or more data tables.

30. (Previously Presented) The information retrieval process of claim 27, wherein a first filter level of said filter tree table corresponds to a column in said data set.

31. (Original) The information retrieval process of claim 25, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

32. (Original) The information retrieval process of claim 25, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

33. (Canceled).

34. (Original) The information retrieval process of claim 25, wherein said filtering query is a SQL query.

35. (Previously Presented) The information retrieval process of claim 25, wherein said user-selected data groupings are input by clicking on a selection icon corresponding to a predetermined data grouping.

36. (Original) The information retrieval process of claim 25, wherein said summary result further includes a data item result for said each selected data grouping.

37. (Currently amended) An information retrieval filtering apparatus, comprising:

- a processor;
- a user interface, communicating with said processor, to interface with a user;
- an unfiltered data table, communicating with said processor, to store one or more data items;
- a filtered data table, communicating with said processor, to store one or more filtered data items;
- a filter tree table, communicating with said processor, to store one or more selectable data groupings associated with said data items;

wherein said processor executes instructions to perform a filtering method, said filtering method including is adapted to:

~~receiving~~ receive a user input,[[s]] from said user interface, ~~said user inputs including selections and de-selections of said selectable~~ for selecting or deselecting at least one of said data groupings in said filter tree table,

~~control a flow of data items into said unfiltered data table,~~

generating generate at least one filtering query based on said at least one selected data groupings ~~in said filter tree table,~~

running ~~run~~ said filtering query against said unfiltered data table,

filling ~~fill~~ said filtered data table with filtered data items from said unfiltered data table,

displaying ~~display~~ said filtered data table ~~using said user interface,~~ and ~~display~~ said filter tree table using said user interface.

38. (Previously Presented) The apparatus of claim 37, wherein said processor, said unfiltered data table, said filtered data table and said filter tree table are hosted by a data server accessible to a plurality of clients in a client-server arrangement.

39. (Previously Presented) The apparatus of claim 37, wherein said processor, said unfiltered data table, said filtered data table and said filter tree table are hosted by a user computer that includes input and output devices.

40. (Previously Presented) The apparatus of claim 37, further comprising a data source interface, communicating with said processor, to receive data from one or more external data sources.

41. (Previously Presented) The apparatus of claim 37, further comprising a data source interface, communicating with said processor, to receive data items from one or more external data sources and translate said received data items into a predetermined data format.

42. (Original) The apparatus of claim 37, further comprising at least one internal data source communicating with said processor.

43. (Currently Amended) The apparatus of claim 37, wherein said filter tree table is ~~adapted to store~~ data item counts corresponding to each data grouping.

44. (Currently Amended) The apparatus of claim 37, wherein said filter tree table is adapted to store data item results corresponding to each data grouping.

45. (Currently Amended) The apparatus of claim 37, wherein said processor is adapted to generate a display of one or more data items corresponding to selected data groupings in said filter tree table.

46. (Currently Amended) The apparatus of claim 37, wherein said processor is adapted to generate a display of a parametric filter comprising data groupings stored in said filter tree table.

47. (Currently Amended) The apparatus of claim 37, wherein said processor is adapted to generate a display of a parametric filter comprising data groupings and data item counts stored in said filter tree table.

48. (Currently Amended) The apparatus of claim 37, wherein said processor is adapted to generate a display of a parametric filter comprising data groupings and data item results stored in said filter tree table.